

Name: ans key- YOU MUST SHOW ALL TP: WORK!

HW#48: Quiz 9 Review
Geometry
Due Date: Wednesday, Dec. 12th, 2012

Failure to show work on all problems or use complete sentences will result in a LaSalle.

<p>1) Simplify:</p> $3\sqrt{5} - \sqrt{54} - 3\sqrt{24}$ $3\sqrt{5} - 15\sqrt{6}$	<p>2) Simplify:</p> $-\sqrt{12} - \sqrt{24} - 3\sqrt{27}$ $-11\sqrt{3} - 2\sqrt{6}$
<p>3) Solve:</p> $\sqrt{-2 - p} = \sqrt{2p + 13}$ $p = -5$	<p>4) Solve:</p> $\sqrt{55 - 6a} = a - 8$ $a = 9$
<p>5) Simplify: $\sqrt{-24k^5}$</p> $2ik^2\sqrt{6k}$	<p>6) Simplify: $\sqrt{\frac{-150}{4}}$</p> $\frac{5i\sqrt{6}}{2}$
<p>7) Simplify: $4i(9i) =$</p> -36	<p>8) Simplify: $4i(-6 + i) =$</p> $-4 - 24i$
<p>9) Find values of x and y to make each equation true.</p> $3x + 2iy = 6 + 10i$ $x = 2, y = 5$	<p>10) Which real number is equivalent to i^{12}?</p> <p>A. -1 B. $\sqrt{-1}$ C. 1 D. 9 E. There is no equivalent real number</p> <p>hint: $(i^4)^3 = 1^3 = 1$</p>

PUSH IT TO THE LIMIT.

You MUST SHOW ALL WORK!

11) Simplify: $2(6 - i) + i(3 - i) =$

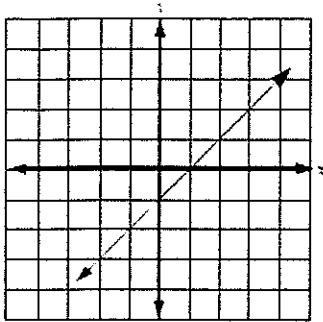
- A. $13 - 6i$
- B. $11 + i$
- C. $11 - 6i$
- D. $13 + i$

$13 + i$

12) Simplify: $(-5i + 3)(-2i - 8)$

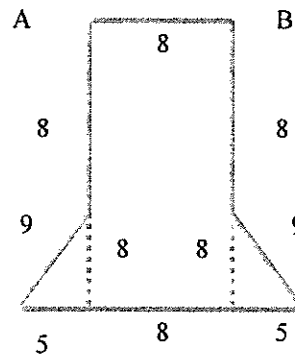
~~10i + 40i - 10i - 24~~ $-34 + 34i$

13) What would be the equation of the line $y = x - 1$ if it were translated down 7 units?



$y = x - 8$

14) If rectangle ABCD is inside the hexagon below, what is the area of the entire hexagon?



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15) If m is the midpoint of segment AC and m has the coordinates $(6, 2)$ and C has the coordinates $(4, 6)$, what are the coordinates of the endpoint A ?

$(8, -2)$

16) Simplify: $8\sqrt{147}$

$56\sqrt{3}$

Write $\sqrt{1} < 3$ Math
at the top of your paper and
show Ms. Ziegler
for a surprise!

PUSH IT TO THE LIMIT.